between 80 and 90 in number, the prognosis for life seemed better when the retinitis came on after fifty-five years than before.

There are two principal factors in the production of renal retinitis, a morbid state of the blood and disease of the retinal arteries; in most cases both conditions are present. The ophthalmoscopic observer may fairly suspect an early stage of granular kidney whenever he finds decided hyaline thickening of the retinal arteries, especially in young subjects. This hyaline fibroid thickening of the retinal arteries is now well known to be indicated by intensification of the bright streak and compression of the veins where they are crossed by arteries. This condition is not always symmetrical in the two eyes nor evenly distributed in the same eye. After middle age hyaline thickening is less useful as a diagnostic sign of granular kidney. We must still take it, however, as a sign of danger of cerebral hemorrhage.

The general opinion is that the particular characters of the retinitis do not afford any guide to the kind of chronic kidney disease present. The more violent cases are chiefly toxic and the milder more chronic ones chiefly vascular in origin.

Nettleship thinks it certain that there is only one sort of renal retinitis and the many varieties of change seen during life indicates only different stages and degrees of (*a*) general œdema; (*b*) exudation into the nerve-fibre layer; (*c*) spots or patches of opacity in the deeper layers due to degeneration of fibrinous or albuminous effusion in the inner granule layers and perhaps to changes in Muller's fibres.

The optic neuritis and retinal hemorrhages so often present in varying degrees are not characteristic, though they increase the difficulty in interpreting the morbid appearances.

Other constitutional or local conditions produce retinitis resembling and sometimes indistinguishable from that caused by disease of the kidneys, of which the retinitis associated with glycosuria is particularly to be dwelt upon. In some of these cases the urine also contains albumin, and here the disease may be the ordinary albuminuric retinitis, but this is not true of others. The life prospects in the retinitis of diabetes seems better than in ordinary renal retinitis.

The typical retinitis of renal disease is nearly always symmetrical though not always equally so, and rarely the affection is confined to one eye. It is doubtful whether relapses occur, but we have proof that retinal hemorrhages are repeated in eyes that have passed through albuminuric retinitis.

Albuminuric choroiditis is mentioned by many writers. Iritis in renal disease has been seen in two cases by Knies.

Influence of Resection of the Cervical Sympathetic in Optic Nerve Atrophy, Hydrophthalmos, and Exophthalmic Goitre.—BALL (*Journal of the American Medical Association*, January 30, 1904), from personal experience and a review of reported cases by others, comes to the following conclusions: 1. Excision of the superior cervical ganglion of the sympathetic nerve is worthy of a trial in those cases of simple atrophy of the optic nerve which resist measures less heroic. 2. It is yet impossible to say whether the bilateral operation is advisable in unilateral optic nerve atrophy. 3. The value of sympathectomy in congenital hydrophthalmos has not been demonstrated. 4. In exophthalmic goitre complete excision of the cervical sympathetic is followed by a larger percentage of cures than is any other procedure. Thus far no deaths have been recorded. The number of operations, however, is small, and final conclusions can be announced only after a large number of cases shall have been treated by this method.

A Hitherto Undescribed Membrane of the Eye and its Significance.—VERHOEFF, Boston (*The Royal London Ophthalmic Hospital Reports*, October, 1903), after a careful study of many sections arrives at the following conclusions: In the pigment layer of the retina there is a fenestrated membrane identical in structure and staining reactions with the membrana limitans externa.

The rods and cones are not nervous elements, but modified ependymal cells, and are analogous to sensory epithelium.

The limiting membrane of the rosettes of the glioma retinæ is a fenestrated membrane similar in every way to the membrana limitans externa, and the rosettes correspond to the neuroepithelium of the normal retina.

The structure of the limiting membrane of rosettes explains why they assume their spherical and spiral-like forms.

"Neuroepithelioma retinæ" is no more suitable than "glioma retinæ" for the class of tumors to which these terms have been applied.

Enucleation and its Substitutes.—GRIMSDALE (*Medical Times and Hospital Gazette*, December 19, 1903) advocates a modified form of Mules' operation. The modification consists in leaving the cornea in place and making a large curved incision above it in the sclera. The cosmetic result is excellent. There is no sinking of the artificial eye. The movements of the latter are very good, as much as one-half inch laterally and vertically almost the normal. The objections to enucleation are not only cosmetic, but the irritation caused by the prothesis is to be considered also because of the large space between it and the concave stump, in which secretion accumulates, and decomposition gives rise to chronic conjunctivitis, and finally changes in the subconjunctival tissue, so that bands are formed which render the retention of an artificial eye difficult and sometimes impossible. Attempts at improving such a stump are not likely to be successful.

The injection of paraffin into the space of Tenon is certainly not devoid of its own special risks; it has been followed in some instances by thrombosis of the neighboring veins and may thus cause blindness in the other eye.

The attempt has been made to transplant a rabbit's eye whole into the empty orbit, but it has not been successful. Even where the transferred tissues have lived, they have softened and left a very imperfect stump.

As regards the comparative safety from sympathetic ophthalmia, the advantage seems to be with enucleation; although, as is well known, many cases have followed even enucleation. Still, these, like those which have followed Mules' operation, have been of a mild type. There is no case in which sympathetic ophthalmia has followed a Mules' operation for any other condition but injury—*i. e.*, not when the operation has been performed for staphyloma or similar condition.

When enucleation is decided upon it would, perhaps, be best to use Frost's method of inserting a large glass sphere in the hollow of Tenon's capsule after enucleation and stitching it in.